AGREEMENT

THIS AGREEMENT dated this 24th day of July, 2001, by and between LEON COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the "County" and ENVIRONMENTAL RESEARCH & DESIGN, INC., hereinafter referred to as the "Contractor."

WHEREAS, the County has determined that it would be in the best interest of the citizens of Leon County, Florida, that the County be able to utilize the services of private persons when such services cannot be reasonably provided by the County; and

WHEREAS, the County has determined that it would be better to contract for these services than to hire the necessary personnel to satisfy the needs of the County: and

WHEREAS, in order to secure the lowest cost for these services, the County has sought and received competitive bids from contractor for such services.

NOW, THEREFORE, the parties hereto agree as follows:

1. SERVICES TO BE PROVIDED

The Contractor hereby agrees to provide professional services to the County for the conduct of the Lake Lafayette Watershed Study in accordance with the Scope of Services as contained in Exhibit A.

2. WORK

Any work to be performed shall be upon the written request of the County Administrator or his representative, which request shall set forth the commencing date of such work and the time within which such work shall be completed.

The performance of Leon County of any of its obligations under the purchase order or agreement shall be subject to and contingent upon the availability of funds lawfully expendable for the purposes of the purchase order or agreement for the current and any future periods provided for within the bid specifications.

3. TIME

21 months

The contract shall be for the period of August 1, 2001 through April 30, 2003. After the initial period, at the discretion of the County, the contract may be extended for no more than ninety days by the County Administrator upon the written request of the Contractor.

4. CONTRACT SUM

The Contractor agrees that for the performance of the services as outlined above, it shall be remunerated by the County a total sum of $299,185.00. Payments will be made on a monthly basis according to the percentage of work completed and billed by the Contractor.

5. PAYMENTS

The County will make such payments within thirty (30) days of submission and approval of invoice for services.

6. STATUS

The contractor at all times relevant to this Agreement shall be an independent contractor and in no event shall the Contractor nor any employees or sub-contractors under it be considered to be employees of Leon County.

7. INSURANCE

A. Bidder shall purchase and maintain the following minimum limits of insurance:

1) General Liability: $1,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage. If Commercial General Liability Insurance or other form where a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2) Automobile Liability: $1,000,000 combined single limit per accident for bodily injury and property damage.

3) Workers' Compensation and Employer's Liability: Insurance covering all employees meeting statutory limits in compliance with applicable state and federal laws and Employer's Liability with a limit of $500,000 per accident.

B. Certificates of Insurance acceptable to the County shall be filed with the County prior to the commencement of the work. These policies described above, and any certificates shall specifically name the County as an additional Insured and shall contain a provision that coverage afforded under the policies will not be canceled until at least thirty (30) days prior to written notice has been given to the County.

C. Contractors shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

D. Cancellation clauses for each policy should read as follows: *Should any of the above described policies be canceled before the expiration date thereof, the issuing company will mail thirty (30) days written notice to the Certificate Holder named herein.*

8. LICENSES

The Contractor shall be responsible for obtaining and maintaining his city or county occupational license and any licenses required pursuant to the laws of Leon County, the City of Tallahassee, or the State of Florida. Should the Contractor, by reason of revocation, failure to renew, or any other reason, fail to maintain his license to operate, the contractor shall be in default as of the date such license is lost.

9. ASSIGNMENTS

This Contract shall not be assigned or sublet as a whole or in part without the written consent of the County nor shall the contractor assign any monies due or to become due to him hereunder without the previous written consent of the County.

10. HOLD HARMLESS

The Contractor agrees to indemnify and hold harmless the County from all claims, damages, liabilities, or suits of any nature whatsoever arising out of, because of, or due to the breach of this agreement by the Contractor, its delegates, agents or employees, or due to any act or occurrence of omission or commission of the Contractor, including but not limited to costs and a reasonable attorney's fee. The County may, at its sole option, defend itself or allow the Contractor to provide the defense. The Contractor acknowledges that ten dollars ($10.00) of the amount paid to the Contractor is sufficient consideration for the Contractor's indemnification of the County.

11. MINORITY BUSINESS ENTERPRISE (M/WBE)PARTICIPATION

The Contractor shall meet or exceed the M/WBE participation level of 15.5% except when the County Good Faith Committee approves an exception.

Any "Good Faith Statement" provided by a Contractor shall follow the requirements of the Florida Statutes, and must demonstrate through documentation that every reasonable effort has been made to achieve the requested percentage.

The Contractor shall establish a monthly reporting system of the work done by and payments made to certified minority business enterprises as a part of this project. The reports shall detail each invoice submitted to the County and a break down of payments to all subcontractors therein by M/WBE classification.

12. TERMINATION

Leon County may terminate this Contract without cause, by giving the Contractor thirty (30) days written notice of termination. Either party may terminate this Contract for cause by giving the other party hereto thirty (30) days written notice of termination. The County shall not be required to give Contractor such thirty (30) day written notice if, in the opinion of the County, the Contractor is unable to perform its obligations hereunder, or if in the County's opinion, the services being provided are not satisfactory. In such case, the County may immediately terminate the Contract by mailing a notice of termination to the seller.

13. PUBLIC ENTITY CRIMES STATEMENT

In accordance with Section 287.133, Florida Statutes, Contractor hereby certifies that to the best of his knowledge and belief neither Contractor nor his affiliates has been convicted of a public entity crime. Contractor and his affiliates shall provide the County with a completed public entity crime statement form no later than January 15 of each year this agreement is in effect. Violation of this section by the Contractor shall be grounds for cancellation of this agreement by Leon County.

14. REVISIONS

In any case where, in fulfilling the requirements of this contract or of any guarantee, embraced in or required thereby it is necessary for the Contractor to deviate from the requirements of the bid, Contractor shall obtain the prior written consent of the County.

15. CONSTRUCTION

The validity, construction, and effect of this Contract shall be governed by the laws of the State of Florida.

AGREEMENT BETWEEN LEON COUNTY AND ENVIRONMENTAL RESEARCH & DESIGN, INC
BC-02-21-01-13

WHERETO, the parties have set their hands and seals effective the date whereon the last party executives this Agreement.

CONTRACTOR

WITNESS: _____ BY: Harvey H. Harper, III
President

WITNESS: Leslie Wright DATE 8/30/01

(CORPORATE SEAL)

STATE OF Florida
COUNTY OF Orange

The foregoing instrument was acknowledged before me this 30th day of August, 2001.

By Harvey H. Harper, III President of Environmental Research & Design, Inc.
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)

a Florida corporation, on behalf of the corporation.
(State or place of incorporation)

He/she is personally known to me or has produced _____ as
(type of identification)

Sharon H Darling
Signature of Notary

Print, Type or Stamp Name of Notary

Adm. Asst.
Title or Rank

Serial Number, If Any

Sharon H Darling
My Commission CC870506
Expires November 7, 2003

AGREEMENT BETWEEN LEON COUNTY AND ENVIRONMENTAL RESEARCH & DESIGN, INC
BC-02-21-01-13

LEON COUNTY, FLORIDA

BY: _____
Dan Winchester, Chairman
Board of County Commissioners

DATE: [redacted]

ATTEST:
BOB INZER, CLERK OF THE COURT
LEON COUNTY, FLORIDA

By: _____

APPROVED AS TO FORM:
LEON COUNTY ATTORNEY'S OFFICE

By: _____
Herbert W.A. Thiele, Esq.
County Attorney

EXHIBIT A: SCOPE OF SERVICES
LAKE LAFAYETTE WATERSHED STUDY

TASK 1: Obtain initial input from stakeholders on project issues.

1-1 Identify and determine contacts for project stakeholders. Project stakeholders include Leon County, City of Tallahassee, property owners, general public, scientific community, USGS, Florida Department of Geology, Northwest Florida Water Management District (NWFWMD), Florida Department of Environmental Protection, Florida Fish and Wildlife Commission, and U.S. Environmental Protection Agency. Leon County will be responsible for providing contacts for appropriate property owners, public groups, and the local scientific community.

1-2 Schedule, coordinate and attend a meeting with identified stakeholders. The purpose of the meeting is to review the overall project objectives, scope of services, contacts for each organization, project schedule, and to request input on the project from the various stakeholders. Leon County will be responsible for providing a location for the meeting.

1-3 Evaluate the information discussed at the stakeholders meeting and prepare a meeting memorandum summarizing the major items discussed during the meeting. Copies of the meeting memorandum will be provided to each attendee.

TASK 2: Collect, review, and evaluate all available historic data related to Lake Lafayette and the Lake Lafayette Watershed.

2-1 Acquire and review existing studies and data concerning water quantity, water quality, and sediment quality in Lake Lafayette and the Lake Lafayette Watershed. At a minimum, the following governmental agencies shall be included in this search:

(1) U.S. Geological Survey: Surface Water and Groundwater Divisions

(2) Florida Department of Environmental Protection
- a. Surface Water Division
- b. Groundwater and Drinking Water Programs
- c. St. Marks River Basin Ecosystem Study
- d. Sewage Package Plant Permit (Lake Heritage Estates)
- e. Water Quality Data for FDOT's Weems Road SWMF
- f. Aquatic Plant Management Program (Jesse Van Dyke)

(3) Florida Department of Geology

(4) Florida Fish and Wildlife Commission (Lake Piney Z Restoration Program)

(5) Northwest Florida Water Management District
- a. Water Well Permitting Division
- b. Leon County - City of Tallahassee Stormwater Master Plan (models of main tributaries)

(6) Leon County Department of Public Works, Stormwater Division
- a. Centerville Road Culvert Study
- b. Evaluation of Proposed Weems Road SWMF (Dames & Moore)

(7) Leon County Department of Community Development
- a. Bradfordville Stormwater Study
- b. Lake Lafayette Monitoring Program (McGlynn Labs)
- c. County Landfill - Sewage Package Plant Pollution Investigation
- d. Topographic maps from GIS Division

(8) City of Tallahassee Stormwater Program
- a. Flood Model of Northeast Ditch (Singhofen)
- b. Pollutant Loading Analysis of Basins (URS and ERD)

(9) City of Tallahassee Growth Management
- a. Stormwater Permits for Piney Z Development

(10) City of Tallahassee Aquifer Protection Program (well water quality data)

2-2 Evaluate collected information for completeness, accuracy, and usefulness. This task includes performing a statistical analysis of historic lake and tributary water quality data. Enter all available water quality data information into a SAS database and into a spreadsheet format such as Excel. Parameters to be considered include:

(1)	Temperature	(16)	Total Kjeldahl Nitrogen (TKN)
(2)	pH	(17)	Particulate Nitrogen
(3)	Conductivity	(18)	Total Nitrogen (TN)
(4)	Alkalinity	(19)	Orthophosphorus
(5)	Color	(20)	Total Phosphorus (TP)
(6)	Secchi Disk Depth	(21)	Total Organic Carbon (TOC)
(7)	Dissolved Oxygen (DO)	(22)	Chlorophyll-a
(8)	Dissolved Oxygen Saturation	(23)	Fecal Coliform
(9)	Total Dissolved Solids (TDS)	(24)	Fecal Streptococci
(10)	Total Suspended Solids (TSS)	(25)	Benthic Macroinvertebrate Inventory
(11)	Turbidity	(26)	Numbers of Taxa
(12)	Biochemical Oxygen Demand (BOD)	(27)	Measure of Biodiversity
(13)	Nitrate-Nitrite Nitrogen	(28)	Description of Macrophyte Community
(14)	Ammonia Nitrogen	(29)	Metals
(15)	Dissolved Organic Nitrogen	(30)	Synthetic Organics

In addition to the parameters listed above, TN/TP ratios will be calculated to assist in defining nutrient limitation and selecting treatment practices. The quality of the historic water quality data will be evaluated by reviewing the consistency of the data, presence of outliers, number of data points, frequency of monitoring, time of year the samples were collected, field sampling methods, extent of parameters measured, and laboratory detection limits. After entering the historic data set into a SAS database, the data set will be tested for normalcy of data distribution by examination of residuals. If required, a log transformation will be performed on individual variables to obtain a normally distributed probability function. Once a normally distributed data set is achieved, simple univariate statistics such as mean and standard deviation will be performed. If sufficient data is available, an ANOVA comparison will be performed on water quality characteristics over time. Trends in changes in water quality over time will be identified to the maximum extent possible. The results of this task will be presented in both tabular and graphical forms.

2-3 Determine the extent of available information related to underground petroleum and hazardous materials tanks, spills, and clean-up efforts in the project Watershed. Perform a cursory review of this information, including discussions with FDEP and Leon County to determine if this information suggests that there are major pollution issues which should be further evaluated in Phase II. If the data suggests there are major pollution issues, develop a list of tasks to be completed during Phase II of the project.

2-4 Review existing and "to be received" topographic data for Lake Lafayette available from the County and the Florida Fish and Wildlife Commission. Evaluate the need for collecting additional topographic and/or bathymetric information for Lake Lafayette during Phase II of this project.

2-5 Evaluate available information related to vegetative mapping conducted in Lake Lafayette. Potential sources of data include McGlynn Laboratories, the Florida Fish and Wildlife Commission, and Jesse Van Dyke (FDEP aquatic plant management program). ERD will also review available information from Leon County from aerial photographs and GIS digital imagery. Based on available information, determine if additional vegetative mapping efforts should be conducted during Phase II of the project.

2-6 Evaluate available information related to sediment physical and chemical characteristics in Lake Lafayette. Determine the need for collecting and analyzing additional sediment core samples in Lake Lafayette during Phase II of the project.

2-7 Evaluate available groundwater quantity and quality data in and around Lake Lafayette to determine the anticipated significance of groundwater seepage into the lake. Determine the need for installing and monitoring lake bottom seepage meters during Phase II of the project.

TASK 3: **Select goals for Lake Lafayette and surface water which discharges to the sink in upper Lake Lafayette.**

3-1 Schedule, coordinate, and attend a meeting with project stakeholders to present the results of the historic data review, need for additional data collection, and identified pollutants of special concern for Lake Lafayette. Leon County will be responsible for providing a location for the meeting.

3-2 Select pollutants of special concern for Lake Lafayette and water which discharges to the sink in upper Lake Lafayette based on work efforts in Task 2 and the stakeholders meeting from Task 3-1.

3-3 Establish goals for Lake Lafayette, including water quality, vegetative cover, public access, woodstork rookery, fisheries, etc. It is anticipated that specific stakeholders will have specific concerns. The established goals should address the concerns of all stakeholders to the maximum extent possible.

3-4 Establish water quality goals for surface water discharging to the sink in upper Lake Lafayette. The goals may be based on meeting State Class III surface water criteria, meeting State groundwater/drinking water criteria, not exceeding specified annual mass pollutant loadings, or meeting specific pollutant concentrations.

TASK 4: **Develop a Phase II Monitoring Program and Proposal.**

4-1 Based on the results of Tasks 1, 2 and 3, propose locations for:

(1) Gauges for measuring lake stage, such as Lake Lafayette near the sinkhole; Lake Piney Z, Alford Arm immediately north of railroad, or Lower Lake Lafayette immediately south of railroad

(2) Gauges or flow meters for measuring tributary flows, such as Lafayette Creek Tributary (NWFWMD has extensive system in place)

(3) Rainfall gauges, such as Falls Chase near sinkhole (NWFWMD has extensive system in place)

(4) Collection of lake surface water samples and the protocols/procedures for sampling. This may include adding stations, such as Lake Piney Z, Alford Arm immediately above railroad causeway culverts, or additional stations in Alford Arm or Upper Lake Lafayette.

(5) Collection of tributary stormwater and baseflow samples and the protocols/procedures for sampling, such as Weems Road Tributary, Lafayette Creek Tributary, Alford Arm Tributary, Piney Z Subdivision

outfall to Lake Piney Z, Lake Heritage Estates Tributary outfall to Lower Lake Lafayette, or Verdura II + Mt. Sinai Basins outfall to Lower Lake Lafayette

(6) Collection of groundwater samples, including the number of wells and specific locations of water wells to be sampled. Consideration will be given to upstream wells receiving regional groundwater flows and downstream wells, possibly indicating pollutant inputs to the sinkhole. Determine need for the installation of additional groundwater wells adjacent to the sinkhole.

(7) Collection of lake bottom sediment core samples

4-2 For each sampling location identified in Task 4-1, determine the frequency of sample collection, total number of samples to be collected, type of sample to be collected (i.e., grab sample or flow-weighted sample), and parameters to be analyzed (i.e., metals, organics, or inorganics). If possible, samples will be collected in accordance with EPA NPDES sampling protocol.

4-3 Evaluate various models to estimate annual runoff volumes and pollutant loadings from the project Watershed and to predict water quality in Lake Lafayette. Consideration will be given to utilizing the annual runoff volume/pollutant loading model developed by ERD for the City of Tallahassee as well as the EPA SWMM Model. For the lake water quality model, consideration will be given to a spreadsheet trophic state model or the EPA WASP Model. The models will be selected based on the usefulness of existing models, the water quality parameters of concern and the predicted accuracy of each model.

4-4 Evaluate the pluses and minuses of developing a future pollutant loading scenario for Lake Lafayette. This will be based on the significance of anticipated land use and pollutant loading changes in the watershed and the potential effect on the lake.

4-5 Acquire a cost estimate from the County GIS Department for providing existing and possibly future land use maps and stormwater model parameters to use during Phase II for hydrologic and pollutant loading modeling.

4-6 Develop and submit to the County a Draft Monitoring Program and Scope of Services, Man-Hours/Fee Summary, and Schedule for all Phase II work efforts.

4-7 Schedule, coordinate, and attend a meeting with Leon County to discuss the Draft Phase II Monitoring Program and Proposal. The purpose of the meeting is to obtain input and comments from the County on the proposed Phase II program.

4-8 Prepare and submit a Final Phase II Monitoring Program and Proposal to the County based on comments received during the review meeting.

4-9 Prepare and submit a Quality Assurance Project Plan (QAPP) to the County in accordance with FDEP and EPA requirements for County submission to EPA. The QAPP will be prepared for collection and analysis of surface water, stormwater, dry weather baseflow, groundwater, and lake bottom sediments per the Final Monitoring Program. Six copies of the QAPP shall be submitted.

Phase I

EXHIBIT B: MAN-HOUR / FEE SUMMARY
LAKE LAFAYETTE WATERSHED STUDY

A. Labor

TASK	PERSONNEL (with hourly rates)								TOTAL NUMBER OF MAN-HOURS	TOTAL COST ($)
	ERD				McGLYNN LABS		BERRYMAN & HENNIGAR			
	Dr. Harvey H. Harper, P.E. Project Director ($110)	Jeffrey L. Herr, P.E. Project Manager ($95)	David Baker, P.E. Project Engineer ($65)	Sharon Darling Clerical ($40)	Sean McGlynn, Ph.D. Project Manager ($94)	Thomas Deck Chemist ($45)	Mike Bateman, P.E. Project Manager ($106)	Janice Law Clerical ($42)		
1-1	--	4	--	--	1	--	--	--	5	$ 474.00
1-2	8	8	--	4	3	--	3	--	26	2,406.00
1-3	--	4	--	1	1	--	--	--	6	514.00
Sub-Total Task 1:	8	16	--	5	5	--	3	--	37	$ 3,394.00
2-1	8	16	--	8	80	20	8	8	148	$ 12,340.00
2-2	8	--	8	--	8	--	--	--	24	2,152.00
2-3	--	--	4	--	--	--	16	8	28	2,324.00
2-4	--	8	--	--	2	--	--	--	10	948.00
2-5	--	8	--	--	8	--	--	--	16	1,512.00
2-6	8	--	--	--	8	--	--	--	16	1,632.00
2-7	8	--	--	--	8	--	--	--	16	1,632.00
Sub-Total Task 2:	32	32	12	8	114	20	24	16	258	$ 22,540.00
3-1	Proj. Stkholders mtg 8	8	--	4	3	--	3 0	--	26	$ 2,406.00
3-2	4	4	--	--	4	--	--	--	12	1,196.00
3-3	4	4	--	--	4	--	--	--	12	1,196.00
3-4	4	4	--	--	4	--	--	--	12	1,196.00
Sub-Total Task 3:	20	20	--	4	15	--	3	--	62	$ 5,994.00

10/24/02

A. Labor (Continued) Phase I

TASK	PERSONNEL (with hourly rates)								TOTAL NUMBER OF MAN-HOURS	TOTAL COST ($)
	ERD				McGLYNN LABS		BERRYMAN & HENNIGAR			
	Dr. Harvey H. Harper, P.E. Project Director ($110)	Jeffrey L. Hart, P.E. Project Manager ($95)	David Bilski, P.E. Project Engineer ($65)	Sharon Darling Clerical ($40)	Sean McGlynn, Ph.D. Project Manager ($94)	Thomas Deck Chemist ($45)	Mike Bateman, P.E. Project Manager ($108)	Janice Law Clerical ($42)		
4-1	8	8	--	--	8	--	--	--	24	$ 2,392.00
4-2	4	4	--	--	4	--	--	--	12	1,196.00
4-3	8	--	--	--	--	--	--	--	8	880.00
4-4	4	8	--	--	--	--	--	--	12	1,200.00
4-5	--	4	--	--	--	--	--	--	4	380.00
4-6	8	8	--	4	8	--	8 7	2	38	3,500.00
4-7 10/24/02 echng	8 2	8 2	--	--	3 2	--	2 0	--	22	2,246.00
4-8	4	4	--	2	4	--	2 0	1	17	1,534.00
4-9	8	--	--	4	16	--	--	--	28	2,544.00
Sub-Total Task 4:	52	44	--	10	43	--	13	3	165	$ 15,872.00
Labor Totals:	**112**	**112**	**12**	**27**	**177**	**20**	**43**	**19**	**530**	**$ 47,800.00**

Attachment # 2
Page 11 of 18

AGREEMENT BETWEEN LEON COUNTY AND ENVIRONMENTAL RESEARCH & DESIGN, INC
BC-02-21-01-13

	DESCRIPTION		TOTAL COST ($)
B.	Reimbursable Expenses		
	1. Outside Reproduction:	Actual Cost	$ 500.00
	2. Plotting:	10 plots @ $15.00/plot	150.00
	3. Printing:	40 prints @1.00/print	40.00
	4. Copies:	2500 copies @ $0.10/copy	250.00
	5. Postage/Overnight Mail	Actual Cost	100.00
	6. Mileage:	2600 miles @ $0.29/mile	754.00
		TOTAL REIMBURSABLE EXPENSES:	$ 1,794.00
		PHASE I TOTAL:	$ 49,594.00

SUMMARY OF PHASE II WORK EFFORTS

1. ERD $ 26,614.00 (54%)

2. Leon County Subconsultants

   a. McGlynn Laboratories, Inc. $ 17,538.00
   b. Berryman and Hennigar, Inc. $ 5,442.00

   Total - Leon County Subconsultants: $ 22,980.00 (46%)

PHASE I TOTAL: $ 49,594.00

PHASE II BUDGET: $ 250,406.00

AGREEMENT BETWEEN LEON COUNTY AND ENVIRONMENTAL RESEARCH & DESIGN, INC
BC-02-21-01-13

EXHIBIT C: SCHEDULE*
LAKE LAFAYETTE WATERSHED STUDY

TASK	DESCRIPTION	2001						2002												2003				
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
1-1	Identify/determine contacts for project stakeholders																							
1-2	Schedule/coordinate/attend meeting with project stakeholders																							
1-3	Evaluate info discussed at stakeholders meeting/prepare meeting memorandum																							
2-1	Acquire/review existing studies/data concerning water quantity, water quality, and sediment quality in Lake Lafayette and the Watershed																							
2-2	Evaluate collected info for completeness, accuracy, and usefulness																							
2-3	Determine extent of available information related to underground petroleum and hazardous materials tanks, spills, and clean-up efforts in the project Watershed																							

*NOTE: Assumes July 1, 2001 start date

Attachment # 2
Page 13 of 18

AGREEMENT BETWEEN LEON COUNTY AND ENVIRONMENTAL RESEARCH & DESIGN, INC
BC-02-21-01-13

TASK	DESCRIPTION	2001						2002												2003				
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
2-4	Review existing and "to be received" topo data for Lake Lafayette																							
2-5	Evaluate available info related to vegetative mapping conducted in Lake Lafayette																							
2-6	Evaluate available info related to sediment physical/chemical characteristics in Lake Lafayette																							
2-7	Evaluate available groundwater quantity/quality data in and around Lake Lafayette																							
3-1	Schedule/coordinate/attend meeting with project stakeholders																							
3-2	Select pollutants of special concern																							
3-3	Establish goals for Lake Lafayette																							
3-4	Establish water quality goals for surface water																							
4-1	Propose locations for various gauges and collection of samples																							
4-2	Determine frequency of sample collection, etc.																							
4-3	Evaluate various models to estimate annual runoff volumes and pollutant loadings																							

TASK	DESCRIPTION	2001						2002												2003				
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
4-4	Evaluate pluses/minuses of developing future pollutant loading scenario for Lake Lafayette																							
4-5	Acquire cost estimate for providing existing/future land use maps and stormwater model parameters																							
4-6	Develop/submit to County Draft Monitoring Program and Scope of Services, Man-Hour/Fee Summary, and Schedule for Phase II efforts																							
4-7	Schedule/coordinate/attend review meeting with County																							
4-8	Prepare/submit Final Phase II Monitoring Program and Proposal to County																							
4-9	Prepare/submit QAPP to County																							

1 2 3 4

Attachment # 2
Page 15 of 15

EXHIBIT D

ANTICIPATED PHASE II SCOPE OF SERVICES

TASK 1: Complete 12 months of monitoring in accordance with the Final Monitoring Program once QAPP approval has been received.

1-1 Install monitoring equipment in Lake Lafayette and the watershed to allow completion of the 12-month monitoring program.

1-2 Perform 12 months of lake and watershed monitoring in accordance with the Final Monitoring Program.

1-3 Review collected monitoring data and current lake conditions once each month to determine the need for additions, deletions, or modifications to the monitoring program.

1-4 Prepare and submit quarterly data reports to the County. The data reports will include all field measurements and sample analyses performed during the previous 3-month period.

TASK 2: Evaluate the Lake Lafayette and Lake Lafayette Watershed existing conditions.

2-1 Develop existing conditions watershed characteristics using information provided by the County.

2-2 Perform hydrologic modeling to determine the annual runoff volume reaching Lake Lafayette from each primary tributary.

2-3 Develop an existing conditions water budget for Lake Lafayette based on hydrologic modeling and the 12-month monitoring program results.

2-4 Develop an existing conditions pollutant loading budget for Lake Lafayette based on the water budget and the 12-month monitoring program.

2-5 Develop and calibrate a lake pollutant loading/water quality model for existing conditions.

2-6 Summarize the existing Lake Lafayette and watershed condition.

Attachment # 2
Page 16 of 18

TASK 3: Select lake and watershed management alternatives for evaluation.

3-1 Develop an extensive list of structural and non-structural, and in-lake and watershed management alternatives to achieve the established project goals.

3-2 Schedule, coordinate, and attend a meeting with project stakeholders to review existing conditions results and the list of structural and non-structural alternatives.

3-3 Select management alternatives for further evaluation.

TASK 4: Develop a management plan for Lake Lafayette and the Lake Lafayette Watershed.

4-1 Develop future condition watershed characteristics using information provided by the County.

4-2 Perform hydrologic modeling for the Lake Lafayette Watershed to determine the annual runoff volume reaching Lake Lafayette from each primary tributary.

4-3 Develop a future condition water budget for Lake Lafayette using the calculated annual runoff volumes and previous water budget elements.

4-4 Develop a future condition pollutant loading budget for Lake Lafayette using the water budget volumes and pollutant concentrations from the monitoring program.

4-5 Determine the anticipated future Lake Lafayette water quality conditions using the calibrated water quality model.

4-6 Calculate the pollutant load reductions necessary to achieve the water quality goals established using the calibrated water quality model.

4-7 Evaluate the water quality related alternatives selected in Task 7 using the calibrated water quality model.

4-8 Develop a Draft Watershed/Lake Management Plan which will achieve the established project goals.

4-9 Schedule, coordinate, and attend a meeting with project stakeholders to present the draft plan.

4-10 Finalize the Watershed/Lake Management Plan based on comments received at the stakeholders review meeting.

TASK 5: Prepare Draft and Final Reports.

5-1 Prepare and submit a Draft Final Report to the County summarizing all project work efforts for review and comment.

Attachment # 2
Page 17 of 18

5-2 Schedule, coordinate, and attend a meeting with Leon County to discuss the Draft Final Report.

5-3 Prepare and submit a Final Report based on comments received on the Draft Final Report.

TASK 6: Administration/Reporting.

6-1 Attend up to 4 additional meetings with the County or others, as directed by the County.

6-2 Prepare and submit monthly project progress reports to the County for approval, discussing work efforts and expenses during the previous month.

6-3 Prepare and submit quarterly project progress reports to the County for submission to EPA in accordance with grant requirements.

ANTICIPATED SUMMARY OF PHASE II WORK EFFORTS:

1.	ERD	$ 137,500 (55%)
2.	Leon County Subconsultants	$ 112,500 (45%)
	TOTAL:	**$ 250,000**

Attachment # 2
Page 15 of 19

21